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(54) Title: USE OF COMPOUNDS CAPABLE OF INHIBITING THE PROTEOLYTIC PROCESSING OF SEMAPHORINS FOR PREVENTION, TREATMENT, DIAGNOSIS AND PROGNOSIS OF AN INVASIVE DISEASE

(57) Abstract: The present invention relates to use of compounds directed to inhibiting expression and/or proteolytic processing semaphorins SEMA3E and/or sema3E and/or activation of a receptor by a proteolytic product of said semaphorins for the manufacture of a medicament for prevention, treatment, diagnosis and/or prognosis of an invasive disease. The invention features the compounds selected from the group comprising antisense compounds derived from the sequence of SEMA3E and/or sema3E, peptide compounds derived from the sequence of said semaphorins, anti-bodies against said semaphorins, and peptide compounds derived from the sequence of Plexin A receptor. Furthermore, the invention provides methods for prognosis and/diagnosis of malignancy of cancer based of estimation of the levels of expression and proteolytic processing of said semaphorins in a sample of a tissue or body fluid. The invention also concerns a method for producing an attractant polypeptide by establishing a cleavage product of SEMA3E. and/or sema3E.

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1PC 7 A61K38/17 C07K14/47 C07K16/18 G01N33/68 C12Q1/00 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) A61K C07K G01N C12Q IPC 7 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, BIOSIS C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to daim No. Х WO 99 47671 A (CHRISTENSEN CLAUSE R L 1,5-19, ;LUKANIDIN EUGENE M (DK)) 28,29, 39,42, 23 September 1999 (1999-09-23) 51-53 page 45 - page 47, figure 4, claims, Seq ID no. 1-4 20,21 Υ CLAUS R.L. CHRISTENSEN ET AL: 1.5 - 19.28,29, "Transcription of a novel mouse semaphorin 39,42, gene, M-semaH, correlates with the metastatic ability of mouse tumor cell 51-53 lines" CANCER RESEARCH, vol. 58, 15 March 1998 (1998-03-15), pages 1238-1244, XP002263840 page 1241 and "Discussion" -/--Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another dtation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 27, 12, 2004 9 December 2004 Name and mailing address of the ISA Authorized officer

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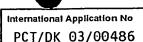


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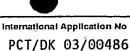
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